

Amendments to the Claims

1 (Currently amended). A process for the detection or quantification of eosinophils and basophils, comprising:

bringing a sample, optionally containing said eosinophils or basophils, into contact with an IL-5 anti-receptor (alpha chain) monoclonal antibody produced by the hybridoma deposited with the Collection Nationale de Culture de Microorganisme (CNCM) under accession no. I-2068 which does not interfere with the fixing of IL-5 to its receptor and which does not inhibit the biological activity of IL-5; and

detecting, and optionally quantifying, the eosinophils and basophils in said sample.

2 (Previously presented). A process according to claim 1, wherein the IL-5 anti-receptor monoclonal antibody is an antibody which does not interfere with IgE.

3 (Previously presented). A process according to claim 1 or 2, wherein the IL-5 anti-receptor monoclonal antibody is an antibody which does not interfere with the cell activation of eosinophils or basophils.

4 (Previously presented). A process according to claim 1 or 2, wherein the detecting step uses a flow cytometer or optical scanning cytometer.

Claim 5 (Cancelled).

6 (Currently amended). A process according to claim [[5]] 19, wherein the other monoclonal antibodies are directed against the markers CD3, CD16 and CD19.

7 (Currently amended). A process according to claim 1 or 2, further comprising, for detecting and optionally quantifying [[,]] activated basophils, bringing the sample into contact with one or more other monoclonal antibodies directed against basophil activation markers.

8 (Previously presented). A process according to claim 7, wherein the activation marker is the CD63 antigen.

9 (Previously presented). A process according to claim 1 or 2, further comprising, for detecting and optionally quantifying activated eosinophils, bringing the sample into contact with one or more other monoclonal antibodies directed against eosinophil activation markers.

10 (Previously presented). A process for the detection and quantification of activated eosinophils according to claim 9, wherein the activation marker is the CD69 antigen.

11 (Previously presented). An anti-IL-5R antibody which is characterised by:

binding to both eosinophils and basophils;
absence of interference with the fixing of IL-5 to its receptor;
absence of interference with IgE;
absence of interference with cell activation of eosinophils or basophils; and
absence of inhibition of the biological activity of IL-5.

12 (Previously presented). A kit for the detection or quantification of eosinophils and basophils, comprising:

an anti-IL-5R monoclonal antibody according to claim 11 conjugated to a first fluorochrome; and

a mixture of antibody markers for lymphocytes, monocytes and neutrophils, conjugated to a second fluorochrome.

13 (Previously presented). A kit for the detection and quantification of activated eosinophils and basophils, comprising:

an anti-IL-5R monoclonal antibody according to claim 11 conjugated to a first fluorochrome;

a mixture of antibody markers for lymphocytes, monocytes and neutrophils, conjugated to a second fluorochrome; and

antibodies directed against activation markers and conjugated to a third fluorochrome.

14 (Previously presented). A kit for the detection or quantification of the oxidative activity of eosinophils or basophils, comprising:

an anti-IL-5R monoclonal antibody according to claim 11 conjugated to a first fluorochrome;

a mixture of antibody markers for lymphocytes, monocytes and neutrophils, conjugated to a second fluorochrome; and

a marker substrate for the oxidative activity of eosinophils or basophils.

15 (Previously presented). A kit according to one of claims 12 to 14, which is applied to the study of allergic, parasitic or leukaemic pathologies.

16 (Previously presented). A process according to claim 1 or 2, wherein the IL-5 anti-receptor monoclonal antibody is an antibody of

the IgG1 type, the corresponding hybridoma of which was deposited with the Collection Nationale de Culture de Micro-organismes (CNCM) under accession no. I-2068.

17(Previously presented). A kit according to one of claims 12 to 14, wherein the IL-5 anti-receptor monoclonal antibody is an antibody of the IgG1 type, the corresponding hybridoma of which was deposited with the Collection Nationale de Culture de Micro-organismes (CNCM) under accession no. I-2068.

18(Currently amended). An [[IL-15]] IL-5 anti-receptor monoclonal antibody produced by the hybridoma deposited with the Collection Nationale de Culture de Micro-organismes (CNCM) under accession no. I-2068.

19(New). A process according to claim 1 or 2, further comprising bringing the sample into contact with other monoclonal antibodies directed against other markers not expressed by the eosinophil or basophil cell types.

20(New). The anti-IL-5R antibody of claim 11, which is produced by the hybridoma deposited with the Collection Nationale de Cultures de Microorganisme (CNCM) under accession no. I-2068.